UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,563	11/16/2005	Mark Christopher Hope	M02B155	1379
71134 Edwards Vacuu	7590 06/24/200 um, Inc.	EXAMINER		
2041 MISSION	COLLEGE BOULEV	TRIEU, THERESA		
SUITE 260 SANTA CLARA, CA 95054		ART UNIT	PAPER NUMBER	
			MAIL DATE	DELIVERY MODE
			06/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/531,563	HOPE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Theresa Trieu	3748				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>30 M</u>	arch 2009					
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
<i>;</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <i>1-20,22-30,32-38 and 42-54</i> is/are pe	4)⊠ Claim(s) <u>1-20,22-30,32-38 and 42-54</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>37 and 38</u> is/are allowed.						
6)⊠ Claim(s) <u>1-20,22-30,32-36 and 42-54</u> is/are rejected.						
7) Claim(s) <u>37 and 38</u> is/are objected to.						
Application Papers						
9)⊠ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
<i>,</i>	1. Certified copies of the priority documents have been received.					
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO/SB/08) To Disclosure Statement(s) (PTO/SB/08) To Disclosure Statement(s) (PTO/SB/08)						
Paper No(s)/Mail Date 6) Other:						

This Office Action is responsive to the applicants' amendment filed on Mar. 30, 2009.

Claims 21, 31, 39-41 have been canceled. Accordingly, claims 1-20, 22-30, 32-38 and

42-54 are pending in this application.

Specification

1. The disclosure is objected to because of the following informalities: there are no

descriptions of Figs 6-10 in the "Brief Description of the Several Views of the Drawing(s)"

section. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on

sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 9, 10, 18, 22, 34-36 and 54 are rejected under 35 U.S.C. 102(b) as being

anticipated by any one of Nishimura (Publication Number JP 60-017283).

Regarding claims 1 and 18, Nishimura discloses a pump comprising: a rotor 4, 5 and a

stator; a housing 8 enclosing the rotor and the stator, the housing having an inlet (A) for

receiving a first fluid, and a port 6 positioned downstream from the inlet; and means 15 for

injecting, a second fluid into the housing through the port, for acting wherein the second fluid

acts on deposits on a surface of the rotor and a surface of the stator.

Regarding claims 9-10, Nishimura discloses the pump is a screw pump having two threaded rotors 4, 5; the port being located downstream of a first two complete turns of thread of the threaded rotors.

3. The method claims 22, 34-36 and 54 are inherent in the operation of the Nishimura.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 2 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura.

Nishimura discloses the invention as recited above; however, Nishimura fails to disclose a plurality of ports. It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the plurality of ports, since it has been held that mere

duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPO 8 (see MPEP §2144.04).

Page 4

5. Claims 3-8, 13-17, 19, 20, 24, 25, 26-30, 32, 33 and 42-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Ingistov.

Regarding claims 3, 5-8, 13, 15, 24, 26, 28, 42-44, 46, 51 and 52, Nishimura discloses the ports 16 being located radially about the housing; at least one of the ports 16 includes a nozzle 15 for spraying fluid; the nozzle 15 being integrally formed within at least one of the ports 16; the housing 8 comprising a two skinned wall having an inner and an outer skins (see Fig. 1) and forming a cavity between the inner and outer skins; the inner skin of the housing is adapted to form the stator; the second fluid is liquid/gas (see abstract). However, Nishimura fails to disclose a location of the ports related to the rotor.

Regarding claims 4 and 25, Ingistov teaches that it is conventional in the art to utilize the ports 34 being located along a length of the rotor 14. With regard claims 14, 16, 17, 19, 20, 27, 29, 30, 32, 33, 45 and 47-50, Ingistov further discloses the second fluid being a liquid/solvent/gas/steam/halogen/the second fluid reactive substance for reacting with the deposits/the fluid comprising one a compound selected from the group consisting of CIF3, F2, and NF3. It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the ports, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70, (see MPEP \$2144.04).

Application/Control Number: 10/531,563 Page 5

Art Unit: 3748

6. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Nishimura.

Nishimura discloses the invention as recited above; however, Nishimura fails to disclose

the pump being a claw/Roots pump. It would have been obvious to one having ordinary skill in

the art at the time the invention was made, to have utilized the claw/Roots pump in the modified

Nishimura device since these types of pumps are shown to be conventionally utilized to pump a

liquid and the claw/Roots pumps are routinely utilized as vacuum pumps.

7. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in

view of Naya.

Nishimura discloses the invention as recited above; however, Nishimura fails to disclose

a chemical vapor deposition.

Naya teaches that it is conventional in the art to utilize the pump being connected to a

chemical vapor deposition apparatus having a process chamber and an outlet of the process

chamber, wherein the pump inlet 16 is connected to the outlet of the process chamber, and

wherein the deposits are a by-product of a chemical vapor deposition process. It would have

been obvious to one having ordinary skill in the art at the time the invention was made, to have

utilized the chemical vapor deposition process, as taught by Naya in the Nishimura apparatus,

since the use thereof would have been attributable to the great amount of reaction products

presenting on the surface of the rotors.

Allowable Subject Matter

8. Claims 37 and 38 are allowed.

Response to Arguments

9. Applicant's arguments filed on Mar. 30, 2009 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the removal deposits recited in claims 1 and 18) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Applicant is duly reminded that a complete response must satisfy the requirements of 37 C.F.R. 1.111, including: "The reply must present arguments pointing out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied

Art Unit: 3748

references. A general allegation that the claims "define a patentable invention" without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section. Moreover, "The prompt development of a clear Issue requires that the replies of the applicant meet the objections to and rejections of the claims." Applicant should also specifically point out the support for any amendments made to the disclosure. See MPEP §2163.06 II(A), MPEP §2163.06 and MPEP §714.02. The "disclosure" includes the claims, the specification and the drawings.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 571-272-4868. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/531,563 Page 8

Art Unit: 3748

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated

TT /Theresa Trieu/ Primary Examiner, Art Unit 3748

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.